

CLAIM AMENDMENTS:

1. (currently amended) One of a number of nodes of a communication system, the nodes being connected to a communication medium for transmitting data among the nodes, said one node comprising:

a communication controller for bringing the data into a format specified by a communication protocol used by the communication system, across which the node is connected to the communication medium, said communication controller having a synchronized clock signal which is synchronized by the node to a global time of the communication system, said synchronized clock providing a synchronized clock signal; a bus guardian for ~~controlling~~ enabling or disabling transmit access of said communication controller to the communication medium, said bus guardian having an electronic circuit generating a bus guardian internal clock signal which is less accurate than said synchronized clock signal, said bus guardian also having means for ~~examining~~ supervising a period of said synchronized clock signal using said internal clock signal; and means for passing said synchronized clock signal to said examining means.

2. (currently amended) The node of claim 1, wherein said communication controller has an additional clock signal and further comprising means for passing said additional clock signal to said bus guardian, wherein said ~~examining~~ means for supervising has means for monitoring said synchronized clock signal using said additional clock signal and means for monitoring said additional clock signal using said bus guardian internal clock signal.

3. (original) The node of claim 2, wherein said means for monitoring said additional clock signal count a number of internal clock signal periods during a configurable number of additional clock signal periods and determine whether a number of counted internal clock signal periods is within a configurable tolerance window.
4. (currently amended) The node of claim 2, wherein said means for ~~monitoring~~supervising said synchronized clock signal using said additional clock signal count a number of additional clock signal periods during a configurable number of synchronized clock signal periods and determine whether a number of counted additional clock signal periods is within a configurable tolerance window.
5. (original) The node of claim 2, wherein said means for monitoring said additional clock signal using said internal clock signal count a number of internal clock signal periods during multiple additional clock signal periods.
6. (currently amended) The node of claim 2, wherein said means for ~~monitoring~~supervising said synchronized clock signal using said additional clock signal count a number of additional clock signal periods during multiple synchronized clock signal periods.
7. (currently amended) The node of claim 2, wherein at least one of said means for monitoring said additional clock signal and said means for ~~monitoring~~supervising said synchronized clock signal comprise a watchdog.
8. (original) The node of claim 1, wherein said bus guardian internal clock signal is generated by means of a resonant circuit comprising a resistance and a capacitance.

9. (currently amended) A method for monitoring a synchronized clock signal from a communication controller for bringing the data into a format specified by a communication protocol used by the communication system, across which communication controller one of a number of nodes of a communication system is connected to a communication medium for transmitting data among the nodes, said communication controller having a synchronized clock which is synchronized by the node to a global time of the communication system, said synchronized clock providing said synchronized clock signal, said node having a bus guardian for controlling access of the communication controller to the communication medium, the bus guardian having an electronic circuit generating a bus guardian internal clock signal which is less accurate than the synchronized clock signal, the method comprising the ~~steps~~step of:
- a) ~~passing the communication controller synchronized clock signal to the bus guardian; and~~
 - b) ~~monitoring~~supervising a period of said synchronized clock signal using said internal clock signal.
10. (currently amended) The method of claim 9, further comprising providing an additional clock signal from the communication controller to the bus guardian, wherein the synchronized clock signal is ~~monitored~~supervised using the additional clock signal and the additional clock signal is monitored using the bus guardian internal clock signal.
11. (original) The method of claim 10, wherein the additional clock signal is monitored by counting a number of internal clock signal periods during a configurable number of additional clock signal periods and determining whether a number of counted internal clock signal periods is within a configurable tolerance window.

12. (currently amended) The method of claim 10, wherein the synchronized clock signal is ~~monitored~~supervised by counting a number of additional clock signal periods during a configurable number of synchronized clock signal periods and determining whether a number of counted additional clock signal periods is within a configurable tolerance window.
13. (cancelled)
14. (cancelled)
15. (currently amended) ~~A computer programmed to execute the method of claim 9~~The node of claim 1, wherein the node is a computer.
16. (currently amended) A ~~data storage~~computer readable medium containing machine readable instructions for carrying of the method of claim 9.
17. (currently amended) The ~~data storage~~computer readable medium of claim 16, the data storage medium comprising at least one of a read-only memory, a random-access memory, and a flash memory.
18. (currently amended) A device comprising the ~~data storage~~computer readable medium of claim 16.
19. (currently amended) A device comprising the ~~data storage~~computer readable medium of claim 17.

20. (new) The node of claim 1, including a bus driver which translates data received from the communication controller into electrical signals applied to the communication media, wherein said bus guardian controls said bus driver.
21. (new) The node of claim 20, wherein the bus guardian is connected to the bus driver to enable or disable a bus driver output based on said supervising.
22. (new) The method of claim 9, including a bus driver which translates data received from the communication controller into electrical signals applied to the communication media, wherein said bus guardian controls said bus driver.
23. (new) The method of claim 9, wherein the bus guardian is connected to the bus driver to enable or disable a bus driver output based on said supervising.